

DISCLAIMER: These Standard Operating Procedures (SOP's) are for the exclusive use of Navy Public Works Center (PWC) Norfolk. They are promulgated as guidance for their NAVFAC Commands. If intended to be used by other activities, they must be tailored to each activity's particular requirements and must be reviewed/approved by the activity's safety professionals prior to use.

Standard Operating Procedure Insertion Steam Meter Removal/Replacement

Safety Equipment Required:

- Gloves
- Hearing protection
- Safety glasses
- Safety shoes

Equipment Required:

- Hand tools
- Insertion and extraction tool for V-bar probe

Procedure

CAUTION: do not close the isolation valve until the probe is fully retracted.

1. a. Remove the lock bolt on target insertion meters. Turn the hand wheel until the probe is fully retracted. Put the lock bolt in place and tighten.

b. Loosen the lock nut on V-bar insertion meters. Using the insertion and extraction tool, extract the probe.

2. Close the isolation valve. Lock-out and tag out the valve per 621.2 STM 1.

3. a. On target meters, slowly loosen the bolts on the meter flange. When all the pressure is relieved, remove the bolts and remove the meter probe assembly.

b. On V-bar meters, slowly remove the probe with the insertion and extraction tool.

4. a. Inspect and clean the flanges on the target meter. Replace the gasket and install a replacement probe.

b. Check the condition of the Teflon washer and O-ring on the V-bar meter, replace them if necessary. Install a replacement probe.

Bring removed meter probe to the shop for repair.

5. Ensure the flow arrow is in the proper direction.

CAUTION: Do not start insertion of either type probe until the valve is fully open.

6. Clear and remove the tags, open the valve fully and insert the probe.

a. On target meters remove the lock bolt and turn the hand wheel until the probe is fully inserted. Put the lock bolt in place and tighten.

- b. On V-bar meters use the insertion tool to insert the probe, lock the locking ring when installed to proper depth.
- 7. Clean up the work area. Remove all debris.
- 8. Fill out installation sheet and give to code 601A.6 Production Controller.